

**Testimony of  
James J. Hoecker, Chairman  
Federal Energy Regulatory Commission  
before the  
Special Committee on the Year 2000 Technology Problem  
United States Senate**

**June 12, 1998**

Mr. Chairman and Members of the Committee:

I appreciate the opportunity to appear before you to discuss the Year 2000 readiness of the utility industry, including electric, oil, and gas utilities. I commend you, Mr. Chairman, and the Special Committee for holding a hearing on this critical issue. My name is James Hoecker, and I am Chairman of the Federal Energy Regulatory Commission (Commission or FERC). Some months ago I appointed a Chief Information Officer (CIO) to be responsible for information technology issues at the Commission. FERC's CIO, Katie Hirning, represents the Commission on the President's Council on Year 2000 Conversion.

The state of Year 2000 readiness of the utility industry is not yet fully known. However, FERC acknowledges the importance of the Year 2000 problem and recognizes that its involvement in solutions may be necessary. Because the energy sector is critical to the operations of all other sectors of the economy, I believe that it is essential for the federal government, along with industry, to promote awareness of this problem through cooperation and communication.

Today I would like to: (1) describe what I understand the industry is doing about the problem; and (2) inform you of what the Commission is doing to encourage industry to take steps

to ensure that our Nation's energy infrastructure still functions properly on January 1, 2000, including its coordination with the President's Council on Year 2000 Conversion.

The Year 2000 issue presents an unusual problem for FERC because the Commission does not exercise direct authority over internal operations of the regulated companies' businesses as a general matter. The Commission would have authority over the ability of regulated utilities to recover in cost-based rates the costs expended in correcting the Year 2000 problem, but not over how utilities implement specific measures to correct the problem. Furthermore, FERC's regulation does not encompass the entire energy sector or even all aspects of the natural gas, electric, or oil pipeline industries. Large portions of these industries are subject to the authority of other federal agencies or state and local governments, or are self-regulated or unregulated.

#### Year 2000 Compliance Within the Commission

The Commission is diligently addressing its own computer systems to make sure that they work on and after January 1, 2000. A Year 2000 task force was established in March 1997 to examine FERC's computer systems and identify systems and applications with the potential for non-compliance, and to suggest a strategy for formulating corrective action for each. Of the 12 automated systems that are considered to mission-critical, one has already been made compliant, one will be upgraded, three have already been retired, four more will be retired, and three will be replaced. The Commission has developed renovation codes as a contingency measure that will enable it to operate even if replacement systems are delayed in implementation. However, FERC has a well developed implementation schedule for total readiness by January 1, 2000. Automated

equipment associated with the agency's physical plant, such as elevators and the security system, were also evaluated. All equipment is compliant except for the security system, which will be upgraded before March 1999.

#### Year 2000 Issues for Energy Businesses

At the present time, any failure to fully understand the seriousness of the issues must be regarded as a significant problem. Cooperation and communication is necessary in order to understand the severity of the problem. There is a need to identify what effect a failed computer, computer software program, or embedded microprocessor would have on the production or delivery of electricity, gas, and oil. Thus far, available information is anecdotal, with very little empirical data on completion of conversion tasks and structured testing.

Year 2000 readiness also includes the operation of not only conventional computer systems, but thousands of embedded microprocessors as well. Embedded systems are present at plants, wellheads, pipelines, control and dispatch centers, headquarters, and other energy facilities. Identifying Year 2000 errors in embedded systems generally requires significant manual effort. The process cannot be automated and is likely to require physical inspection of hardware distributed widely throughout an organization. Taking inventory, assessing, and fixing embedded systems is especially difficult and expensive.

### The Industry Response

The extent of completed Year 2000 work within the energy industry is unknown. Compilation of this information has been inadequate. Larger utilities and some industry associations have promoted awareness of Year 2000 issues and, in some cases, have shared information about industry readiness. The state of awareness and planning of smaller utilities and cooperatives is less certain.

One of the largest Year 2000 programs, offered for a fee by the Electric Power Research Institute (EPRI) to member companies of electric, oil, and gas associations, includes: an electronic system for real-time data and information collected from a number of industries, government agencies, vendors, and other service providers; and workshops for interactive discussion of methods and results among those involved in Year 2000 embedded systems efforts and the sharing of information among participants. The Edison Electric Institute is working closely with the EPRI program, on behalf of investor-owned electric utilities.

The National Association of Regulatory Utility Commissioners' (NARUC) has established an educational program and has a session scheduled in July to discuss Year 2000 issues.

Year 2000 managers within the national oil, gas, and electric associations are in frequent contact and are working together to address these issues. Several Year 2000 programs were initiated in the past year by industry associations. Last year the American Petroleum Institute (API) formed a Year 2000 task force of representatives from industry. They agreed to construct

databases from various segments of the industry. API has scheduled a meeting for July 1998 to discuss Year 2000 compliance, information exchanges, and other issues. API also sponsored and disseminated a Year 2000 awareness research paper.

The Interstate Natural Gas Association of America (INGAA) has conducted a survey of their member companies' Year 2000 compliance status, and the results are currently being analyzed. The Gas Research Institute (GRI) is surveying its member companies to help formulate Year 2000 strategies. The Natural Gas Council (NGC), which encompasses leadership of a number of industry trade associations, is meeting in June to address industry coordination for Year 2000 readiness. It will focus on segment-by-segment coordination and creation of a coordination structure.

#### The Federal Energy Regulatory Commission's Role

On its own, FERC is developing an awareness program for the Commission's regulated entities and industry associations, in coordination with the Energy Working Group activities. The purpose of FERC's outreach is to promote awareness of the potential seriousness of the Year 2000 problem and the need to devote adequate resources to fix it. I am working with the other FERC Commissioners, Office Directors, and the Commission's CIO to promote awareness of the Year 2000 issue and to encourage the cooperation that already exists among energy organizations and their customers. Further, we hope to encourage companies to make more information available to the general public. The public needs specific information on how serious the problem is, what is being done to address it, and what they can expect on January 1, 2000. The

Commission will also make information on Year 2000 issues available to our regulated companies and to the general public through the FERC Website, and we will provide a link to the Energy Working Group Website once it is developed.

We have begun to establish regular channels of communication with appropriate Year 2000 experts in industry and to maintain an awareness of upcoming events and planned initiatives.

We plan to:

- promote awareness among companies under our jurisdiction;
- monitor progress within the industry;
- develop a link on the FERC Website to Year 2000 information;
- encourage the inclusion of Year 2000 subject matter in future industry seminars, trade events, television programs, and publications;
- utilize Year 2000 public speaking opportunities; and
- work with members of the Energy Working Group of the President's Year 2000 Conversion Council.

#### The Oil and Gas sector of the Energy Working Group

The Commission is also working cooperatively with other federal agencies as a member of the President's Council on Year 2000 Conversion. Through our participation in the Energy Working Group of the President's Council on Year 2000 Conversion, FERC is working with DOE, Department of Transportation (DOT), Department of Agriculture, Nuclear Regulatory Commission (NRC), General Services Administration (GSA) and Department of State to develop

effective programs for facilitating Year 2000 solutions throughout the energy industry. The Council's Energy Working Group has been subdivided into two sectors: electric, and oil and gas. DOE is the sector leader for electric and FERC is the sector leader for oil and gas.

On June 5, 1998, the oil and gas sector of the Energy Working Group held a meeting with representatives of trade associations and research institutes representing the oil and gas industries. The meeting was facilitated by John Koskenin, Chairman of the President's Council on Year 2000 Conversion. Federal agencies present included FERC, as sector leader, and DOE, DOT, NRC, and GSA. Participants also included the Gas Industry Standards Board (GISB), Independent Petroleum Association of America, National Propane Gas Association, INGAA, API, National Petrochemical and Refiners Association, American Gas Association, GRI, Association of Oil Pipelines, American Public Gas Association, National Regulatory Research Institute, and NARUC.

The meeting participants were asked to join the oil and gas sector of the Energy Working Group in developing a focused, coordinated effort between the federal agencies and industry associations that would prevent redundant efforts and ensure that all companies in the oil and gas sectors are reached. The oil and gas sector of the Energy Working Group will serve as a point of coordination for all participants and a forum for collaborative efforts. The meeting participants agreed that it would be valuable to designate umbrella organizations for both the oil and gas industries that would be responsible for coordinating the collection and sharing of information among all trade associations and industry groups within each industry.

Meeting participants were asked to designate umbrella organizations for the natural gas industry and for the oil industry. GISB will focus on accounting standards for both oil and gas. Meeting participants agreed to compile existing surveys and information that has already been collected through the umbrella organizations, assess whether it is desirable to update existing surveys, and consider developing a comprehensive survey with core questions that could be used industry-wide in both the oil and gas sectors. An industry-wide survey may be distributed through the umbrella organizations, which can present summaries of the information that they gather to the Energy Working Group. The Energy Working Group is focusing on assessing industry-wide and regional readiness rather than examining the readiness of individual companies. GISB will ascertain if end users associations would be interested in participating in the Energy Working Group. Finally, FERC will serve as the oil and gas sector leader, and will be the point of contact for the umbrella organizations and facilitate the flow of information to a composite Website.

The meeting participants agreed that the focus of monitoring Year 2000 Conversion readiness should be: (1) safety, (2) reliable delivery of energy products, and (3) accurate accounting and billing.

### Conclusion

In the end, energy industry participants have the responsibility to address this problem. I nevertheless believe the Commission has an important role in raising awareness of the issue. I

view it as the Commission's responsibility to the American public to help alleviate this potential threat to the reliability of our energy systems. The Commission has special responsibility to focus on the natural gas and oil pipeline industry as part of the Energy Working Group of the President's Council. I have therefore asked our CIO to promote the sharing of Year 2000 information within the industry. She will also facilitate dissemination of information about what is known in other industries about similar products and problems, as appropriate. Having ensured our own systems are Year 2000 compliant, we will continue to convey to the industry and its customers the importance of achieving solutions to Year 2000 issues promptly.

I look forward to working with the Senate Special Committee in the months ahead, and I welcome your questions.